BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Estimate Cost Rs. 2000000.00

Name of Work: Detailed Estimate for the work of Drilling of borewells and providing pipe line and Maintenance of Existing borewells in ward No- 01 of yelahanka Sub division.

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	Geophysical investigation of site for sinking borewell for supplying drinking water to the habitation either through the hand pump, MWS or P.W.S.S. by vertical electrical sounding by adopting venner or schlumbergers's method, including reconnaissance survey of geological formation, Geological investigation of existing ground water in vicinity, its quality, quantity & acceptability of the users indicating the location of site, recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth of 1.0 mtr in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site, engaging technical personal and labour required etc (P.NO-47, I.NO-9.4, PRED 12-13 SR)	Nos	2				2	1882.00	3764.00
	Basic Rate	1882.00							
	Total	**1882.00**							
2	Sinking of borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above 900 CMF & above in all strata including over budern upto 20 m. fixing of casing pipes, collars & cap with necessary cutting, threading & welding including transportation of rig and supporting vehicle, crew charges & cost of consumables etc., complete including yield testing at the final depth with minimum working of compressor for one hour(excluding cost of casing pipes, collars, cap etc.,) (P.NO-47, I.NO-9.1, PRED 12-13 SR)	Rmt							
	0.00 to 50.00 Mtr.		2	50.00			100.00	315.18	31518.00
	50.00 to 100.00 Mtr.		2	50.00			100.00	412.00	41200.00
	100.00 to 150.00 Mtr.		2	50.00			100.00	458.35	45835.00
	150.00 to 200.00 Mtr.		2	50.00			100.00	484.10	48410.00
	200.00 to 250.00 Mtr.		2	50.00			100.00	560.32	56032.00
	250.00 to 300.00 Mtr.		2	50.00			100.00	600.49	60049.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	306.00							
	3% area weightage	9.18							
	Total	**315.18**							
3	Supplying of ISI Mark 175 mm nominal bore medium black ERW casing pipe of 5mm thick black electric resistance continous welded midle steel tube material confirming to IS 1387/1993 and manufactured from hot rolled steel skelp/stripes in random length of 4 to 7 mtr both ends threaded confirming to IS 554/1985 one end(including of all taxes) (P.NO-III, I.NO-84, PRED 12-13 SR)	Rmt							
			2	60.00			120.00	1325.00	159000.00
	Basic Rate	1325.00							
	Total	**1325.00**							
4	Providing and fixing 250mm dia PVC 6 kg/sqcm pressure pipe including jointing and labur charges for laying pipes and as per specification and directions. (BWSSB SR 13-14, P.No.45 I.no.1 of sl.no.11.)	Each							
			2	18.00			36.00	1133.00	40788.00
	Basic Rate	1100.00							
	3% area weightage	33.00							
	Total	**1133.00**							
5	175 mm dia M.S. Casing cap (P.NO-III, I.NO-85, PRED 12-13 SR)	Each							
			2				2.00	100.00	200.00
	Basic Rate	100.00							
6	M.S. Casing pipe collars 'C' Class (P.NO-III, I.NO-86, PRED 12-13 SR)	Each							
			2	15.00			30.00	150.00	4500.00
	Basic Rate	150.00							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
7	Supply & delivery at site brand new texmo/innoval/lubi/sabar Atalanta/calamal/ waterman/Radha make suitable HP deep well submercible pumpset suitable for vertical installation in 150 dia borewells compressing of single stage or multistage CF pump close coupled by means of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water squirrel cagesubmercible induction motor suitable for operation of 3Ph, 50Hz 380/440 volts AC supply fitted with required accessories such as suction, casing, suction strainers, sand guard. Non return valve etc Complete the pump and motor shall from an integral unit with all the required fittings 15.000 HP 30 stage (P.NO-XXXXIII, I.NO-33, PWD SR 13-14) kirloscar pumps	set					2.00	70600.00	141200.00
			2						
	Basic Rate	70600.00							
8	Providing, GI pipes confirming to IS specification of approved make with fittings such as collars bends elbows tees nipples plugs with cuts threads using white lead & threads for joints wherever necessary as per direction including all lead & lift etc,. complete 'A' grade(excluding cost of fittings)b50mm dia GI pipe (SR 13-14 PWD Page No XVII code No 509, 0154)	Rmtr					550.00		
			2	275.00			550.00	321.00	176550.00
	Basic Rate	321.00							
	Total	**321.00**							
9	Providing & fixing socket GI (heavy duty collar) (Pwd SR pg xxxviii)	No					110.00	84.80	9328.00
			2	55.00					
	Basic Rate	84.80							
10	Supplying and drawing 3 core PVC Sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS: 8130-1984 and virgin grade PVC insulation and sheathed suitable for working voltage upto 1100 volts 4 sqmm of 56 strands 0.3mm dia (P.NO-535, I.NO-30 (c), BWSSB 12-13 SR)	Mtr					1120.00	164.29	183999.20
			2	560.00					
	Basic Rate	159.50							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	3% area weightage	4.79							
	Total	164.29							
11	Supplying & delivery at site brand new / Essen / Lotus sunsines/Adarsh/ Gk controls best indigenous make combine energy meter-cum-control panel board unit of size 1200 x 600 x 300 mm minimum mechanically strong and vermin and water proof the unit shall have two detachable doors suitable for operation on 3ph, 50Hz, 380/440 volts, AC supply with spring loaded latch locking with a key ribs should be provided inside the door , canopy apron and louvers ventilators shall be provided the combine energy mtr cum control panel board unit suitable for operation on 3ph, 50Hz, 380/440 AC supply shall be consisted etc, completed T panel board shall be fabricated on single unit in the above components panel board for suitable pumpset above components panel board for suitable pumpset above 6.50 HP to 15.00 HP with star delta starter (MR)	no							
			2				2.00	10000.00	20000.00
12	Fabricating supplying and mounting MS box of 16 SWG suitable for floor / wall mounting, fully weather proof with provision for better hear description, (providing with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primes paint and finally finished with approved colour enamelled metal paint etc, complete box of 21600 sq cm (P.NO-530, I.NO-39 b, BWSSB SR 13-14)	Sqm Cm							
			2	1100.00	20.00		44000.00		
	Basic Rate	0.33					**44000.00**	0.34	14955.60
	3% area weightage	0.01							
	Total	**0.34**							
13	Providing & Fixing of clamps set and borewell cap to the pump .	No's							
			2				2.00	450.00	900.00
14	Supplying & delivery of brand new best make non return valve of size 50mm as per IS: 778/84 with latest amendments with ISI mark (50mm Gate wheel Valve.) (PWD SR 13-14, P.NO.XXIV, Sl.no, 673)	No's							
			2	3.00			6.00	1600.00	9600.00
	Basic Rate	1600.00							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
15	Supplying and delivery of brand new best make Gate Valve of size 50mm as per IS: 778/84 with latest amendments with ISI mark . 50mm Gate Valve for distributer pipeline. 50mm dia (PWD SR 13-14, P.NO.XXIV, Sl.no, 659)	No's							
			2	3.00			6.00	1145.00	6870.00
	Basic Rate	1145.00							
16	Providing and fixing of 50mm GI bend to motor (PWD SR 13-14, P.NO.XXXVIII GI FITTINGS TABLE)	No's							
			2	3.00			6.00	219.00	1314.00
	Basic Rate	219.00							
17	Providing and fixing of 50mm GI Nipple to motor (PWD SR 13-14, P.NO.XXXVIII GI FITTINGS TABLE)	No's							
			2	3.00			6.00	104.30	625.80
	Basic Rate	104.30							
18	Providing and fixing of 50mm GI union to the motor ((PWD SR 13-14, P.NO.XXXVIII GI FITTINGS TABLE)	No's							
			2	3.00			6.00	223.70	1342.20
	Basic Rate	223.70							
20	Labour charges for erection of new /repaired submersible pumpset along with GI pipes (32/50mm) cable (new submersible pumpset if required will be supplied by the department free of cost and released pump set should be handed over to department) including transportation (each length = 6.00m) (P.No - 564, I.No - 3, BWSSB SR 13-14)	Per length							
			2	52.00			104.00	90.64	9426.56
	Basic Rate	88.00							
	3% area weightage	2.64							
	Total	**90.64**							
21	Erection of combined panel board meter board with all necessary materials and labour including providing CC 1:3:6 foundation bed etc,. Complete for basement out door type. (MR)	No's							
			2	1.00			2.00	475.00	950.00

	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
22	Supplying and fixing miniature circuit breakers/isolators in existing MCB distribution boards using necessary fixing materials and wiring complete as required, 40 to 63 Amps DP (P.NO - 526, I.NO - 13D (a), BWSSB SR 13-14)	No's							
			2	1.00			2.00	906.40	1812.80
	Basic Rate	880.00							
	3% area weightage	26.40							
	Total	**906.40**							
23	Supplying and laying of L.T.U.G Cable having aluminiumconductor PVC insulated shethed galvanised steel wire/ steel tape armoured cable with PVC outer sheathing 1.1 KV class 4 core 16 sqmm cable (confirming to IS 1554) (P.NO - 553, I.NO - 10 (d), BWSSB SR 13-14)	Mtr							
			2	35.00			70.00	169.95	11896.50
	Basic Rate	165.00							
	3% area weightage	4.95							
	Total	**169.95**							
24	Digging of trenches of 0.6mm x 0.50 Mtrs wide refilling the trench to the required ground level and consolidating etc,. Complete sutting road surfaces (P.NO - 554, I.NO - 12 (b), BWSSB SR 13-14) in hard soil	Mtr							
			2	35.00			70.00	56.65	3965.50
	Basic Rate	55.00							
	3% area weightage	1.65							
	Total	**56.65**							
25	Supplying and fixing Class-A GI Pipe on pole/ wall/drain crossing with necessary clamping arrangements for UG Cable of 1.1 KV class 40mm (P.NO - 555, I.NO - 15 (b), BWSSB SR 13-14)	Mtr							
			2	3.00			6.00	294.58	1767.48
	Basic Rate	286.00							
	3% area weightage	8.58							
	Total	**294.58**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
26	Supplying and fixing wiring earth electrode for grounding conduits, IC cutouts and other equipments on the meter board using 40mm dia 2.90 mm thick GI pipe 2.5 mtr long buried in a pit,/ the pit should be filled with equal proportion of salt and charocal 150 mm alround the pipe to complete depth the connections from the pipe to the conduit etc,. is to be established though GI wire of size as per ISI specification 7.3.3 of ISI 732 using 12mm dia boalts, nuts washers and checknuts etc,. the pipe shall have 16 through holes of 122mm dia (P.NO - 552, I.NO - 7 , BWSSB SR 13-14)	No's							
			2				2.00	1699.50	3399.00
	Basic Rate	1650.00							
	3% area weightage	49.50							
	Total	**1699.50**							
27	Supply and fixing LT cast iron pot heads suitable for 1.1 KV class 16 sqmmUG cable filled with necessary bitumen/ insulating compound complete with terminals, clamps, bolts nuts and washers etc, (P.NO - 555, I.NO - 16 (b) , BWSSB SR 13-14)	No's							
			2				2.00	271.92	543.84
	Basic Rate	264.00							
	3% area weightage	7.92							
	Total	**271.92**							
28	Supplying shunt capacitor's confirming to IS 2834, 3phase 400/440 volts grade for power factor improvement of roating machinery capacitor in KVAR rating No's. (MR)	No's						MR	
			3				3.00	1350.00	4050.00
29	Providing and fixing Gun Metal Gate wheel valve confirming to IS specification of approved make as per direction including all lead and lift etc,. Complete. 50mm dia (P.NO - 103, I.NO - 13.79.6, PWD SR 13-14)	No's							
			2	3.00			6.00	1526.40	9158.40
	Basic Rate	1440.00							
	6% area weightage	86.40							
	Total	**1526.40**							

	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Supplying and fixing of polished wood board made of not less than 25mm thick plank on both sides with planks made out on not more than 2 pieces and fixing the same to wall using tapered inverted wooden plugs screws etc., Size 20 x 20 x 2.5 inches (P.NO - 521, I.NO - 2 (f), BWSSB SR 13-14)	No's							
			2				2.00	311.58	623.15
	Basic Rate	302.50							
	3% area weightage	9.08							
	Total	**311.58**							
31	KSRB 2-1.1:Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specifications (P.NO - 5, I.NO - 2.4, PWD SR 13-14)	Cum							
	for PVC pipe		1	2000.00	0.60	0.90	1080.00		
							1080.00	283.02	305661.60
	Basic Rate	267.00							
	6% area weightage	16.02							
	Total	**283.02**							
32	Providing and instalation at site of works P.V.C.Pipes including cost of pipes and specials and incluidng lowring into trenches, laying true to line, level and perfect linking at joints, leak proof including jointing encasing the pipe alround to a depth Not less than 15cm with grave or selected earth avalabile from the execavation Etc., **Page No.12 item No.3.4.2 b PRED SR 2012-13.**	Rmtr							
	75 mm dia 6 KSC PVC pipe		1	750.00			750.00	157.00	**117750.00**
	63mm dia 6KSC		1	1250.00			**1250.00**	112.00	**140000.00**
33	Providing and installation at site of work 20mm GI pipes including cost of pipes and specials and labur incluidng lowering into trenches, laying ture to line, complete as per direction of Engineer in charge for public taps for motors/pipeline (P.No.95, I.No.13.11 PWD SR 15-16)	Mtr							
			2	30.00			60.00	196.10	11766.00

	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	185.00							
	6% area weightage	11.10							
	Total	196.10							
34	Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m and lift upto 1.5m including cost of all labour complete as per specifications (P.NO - 6, I.NO - 2.11, PWD SR 15-16)	cum							
							1080.00	76.32	82425.60
	Basic Rate	72.00							
	6% area weightage	4.32							
	Total	76.32							
35	KSRB 13-6.3-6: Providing and fixing in position brass gate valve with C.I. wheel of approved quality (screwed end) **50mm nominal bore** including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.6 / 13.3,Page No. 92/ Item No. 13.37 / PWD SR 2015-16	Each							
			24				24	2000.00	48000.00
	Basic Rate	2000.00							
36	Gate Value 50mm Nominal Bore gun metal Sl No 673 code No 0164 Page No XXIII SR 2015-16	Each							
			24				24	1600.00	38400.00
	Basic Rate	1600.00							
37	Gate Value 65mm Nominal Bore gun metal Sl No 674 code No 0165 Page No XXIII SR 2015-16	Each							
			24				24	2050.00	49200.00
	Basic Rate	2050.00							

	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Rate Value 80mm Nominal Bore gun metal Sl No 675 code No 0166 Page No XXIV SR 2015-16	Each							
			23				23	2462.00	56626.00
	Basic Rate	2462.00							
39	Bescom Deposit charges	No's	2				2.00	20000.00	40000.00
40	water quality testing charges	LS	2				2.00	2000.00	4000.00
							Sub Total		1999094.00
41	Miscelaneous and rounding off.								906.00
								TOTAL	2000000.00

(Rupees twenty Lakhs Only)

CERTIFICATE

1. The work spot has been inspected and the work is found necessary.
2. The Estimate is prepared as per the PRED SR 2012-13 and PW,P & IWTD SR 2015-16 and BWSSB Electrical SR 2013-14
3. The provisions were made in this estimate are necessary and adequate.
4. This works come under B.B.M.P. limits.

Assistant Engineer

Assistant Executive Engineer
Yelahanka Sub Division
Bangalore-64

Executive Engineer
Yelahanka Division
Bangalore-64

Administrative Approval
Accorded for Rs. 2000000/-
Head of A/c P-1771
CER No. 99 01.01.2016

TECHNICALLY SANCTIONED FOR Rs. 20.00
Rupees Twenty Lakhs
Only
Under P-1771-15-16
Registered as CE( ) No. 99
Subject to conditions contained in enclosed memo EE( ) No. /9/
Dt. Estimate A/ Sanctioned
EE/TS/48/15-16 No.
Dated 2-1-16 Rs. 20.00 lac

Executive Engineer